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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,751	03/16/2004	Atsushi Oohashi	Q80418	1181

23373 7590 02/22/2005

SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER
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LE, DANG D

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/800,751

Applicant(s)

OOHASHI ET AL.

Examiner

Dang D. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 1-6 is/are allowed.  
 6) ☒ Claim(s) 7-9 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) ☐ Notice of Informal Patent Application (PTO-152)  
 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 12/28/05 have been fully considered but they are not persuasive. In the art of motor and generator it is well known to mount the rectifier circuit either inside or outside of the metal housing and to lead the output terminal axially or radially. See Ooiwa et al. (5,949,166), Figures 1 and 10, Hagenlocher et al. (3,731,126), Figure 1, and Kaneyuki (4,843,267), Figure 1.

In addition, references may be combined although none of them explicitly suggests combining one with the other. In re Nilssen, 7 USPQ2d 1500 (Fed. Cir. 1989).

As a result, the rejection of claims 7-9 is still deemed proper and repeated hereinafter.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. (6,150,741) in view of Asao (6,528,912).

Regarding claim 7, Hayashi et al. shows a rotary electric machine (Figures 1 and 2) comprising:

- A rectifier apparatus having positive-side (52) and negative-side (53) heat sinks each mounted with a plurality of diode elements and said rectifier apparatus being mounted to a housing by electrically-connecting said negative-side heat sink to said housing and securely fastening said positive-side and negative-side heat sinks (Figure 1);
- An output terminal (54) for extracting output from said rectifier apparatus; and
- A wiring harness terminal (92) mounted to said output terminal,
- Wherein said output terminal has a head portion disposed at an opposite end from an output extraction end of said output terminal and an external screw thread portion disposed at said output extraction end of said output terminal, said output terminal being mounted to said positive-side heat sink such that said head portion is in a state of close surface contact with a first surface of said positive-side heat sink (right side of 52, Figure 2), said output terminal passes through said positive-side heat sink, and said external screw thread portion projects outward from said housing,

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- A tubular relay member (55) is mounted to said output terminal such that a first end of said relay member is in a state of close surface contact with a second surface of said positive-side heat sink (left side of 52), and
- Said wiring harness terminal (92) is securely fastened to said positive-side heat sink through said relay member by means of a nut (96) screwed onto said external screw thread portion so as to be in a state of close surface contact with a second end (at 56) of said relay member.

Hayashi et al. does not show a circuit board made of a resin in which insert conductors for connecting said diode elements are insert molded and fastening and said circuit board to a mounting surface of said housing, the rectifier mounted inside the metal housing, the output terminal led out of the housing axially, and electrically insulating bush.

Asao shows a circuit board (25) made of a resin in which insert conductors for connecting said diode elements are insert molded and fastening and said circuit board to a mounting surface of said housing, the rectifier mounted inside the metal housing (2), the output terminal led out of the housing axially (Figure 1), and electrically insulating bush (47) for the purpose of providing a faster electrical connection.

Since Hayashi et al. and Asao are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a resinous circuit board, to mount the rectifier

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inside the metal housing, to lead the output terminal out of the housing axially, and to add an electrically insulating bush as taught by Asao for the purpose discussed above.

Regarding claim 8 and 9, it is noted that Hayashi et al. and Asao also show all of the limitations of the claimed invention.

***Allowable Subject Matter***

5. Claims 1-6 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter: the record of prior art does not show a rotary electric machine comprising a mounting member having a head portion disposed at an opposite end from an output extraction end and an output terminal mounting external screw thread portion disposed at said output extraction end, said mounting member being mounted to said positive-side heat sink such that said head portion is in a state of close surface contact with a first surface of said positive-side heat sink, said mounting member passes through said positive-side heat sink, and said output terminal mounting external screw thread portion projects outward from a second surface of said positive-side heat sink, Said output terminal has a coupling seat, a wiring harness terminal mounting external screw thread portion disposed at an output extraction end of said coupling seat and a mounting portion disposed on at an opposite end from said output extraction end of said coupling seat, said output terminal being mounted to said positive-side heat sink by securely fastening said mounting portion to said second surface of said positive-side heat sink in a state of surface contact by means of an output terminal mounting nut screwed onto said output terminal mounting external screw thread portion such that said coupling seat

and said wiring harness terminal mounting external screw thread portion project outward from said housing.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Information on How to Contact USPTO***

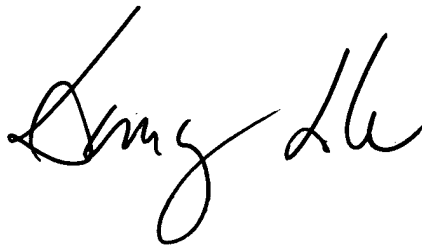
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/15/05

A handwritten signature in black ink, appearing to read 'Dangle', is written over the printed name.

DANGLE  
PRIMARY EXAMINER